## **Amendments to the Claims:**

## 1-13. (Cancelled)

- 14. (New) Polyurethane resin, obtainable by
- a) reacting 1-isocyanato-5-isocyanatomethyl-3,3,5-trimethylcyclohexane (isophorone diisocyanate (IPDI) alone or together with one or more aliphatic diisocyanates, with a polyether polyol having an average molecular weight in the range of 1000 to less than 3000 g/mol;
- b) adding a diamine;
- adding a polyol having an average molecular weight of equal or less than 800 g/mol;
  and
- d) optionally reacting the product obtained in steps a) to c) with at least one terminating agent

wherein the ratio of equivalent weights of diisocyanates to the group of isocyanate-reactive components consisting of the said polyether polyol, the said diamine, the said polyol, and the said terminating agent is 1:1 or greater than 1.

- 15. (New) Polyurethane resin according to claim 14, wherein the ratio of equivalent weights of diisocyanate components to said polyetherpolyol is in a range of between 3,6: 1 and 1:1.
- 16. (New) Polyurethane resin according to claim 14, wherein the polyether polyol is poly-THF2000.
- 17. (New) Polyurethane resin according to claim 14, wherein the diamine is isophorone diamine.
- 18. (New) Polyurethane resin according to claim 14, wherein the polyol is 1,4-butanediol.
- 19. (New) Polyurethane resin according to claim 14, having a weight average molecular weight in the range of 20000 to 80000 g/mol.

- 20. (New) Polyurethane resin according to claim 14, having a degree of urethanisation between 20 and 30%.
- 21. (New) Method of forming a polyurethane resin, comprising the steps of
- a) reacting 1-isocyanato-5-isocyanatomethyl-3,3,5-trimethylcyclohexane (isophorone diisocyanate (IPDI) alone or together with one or more aliphatic diisocyanates, with a polyether polyol having an average molecular weight in the range of 1000 to less than 3000 g/mol;
- b) adding a diamine;
- adding a polyol having an average molecular weight of equal or less than 800 g/mol;
  and
- d) optionally reacting the product obtained in steps a) to c) with at least one terminating agent

wherein the ratio of equivalent weights of diisocyanates to the group of isocyanate-reactive components consisting of the said polyether polyol, the said diamine, the said polyol, and the said terminating agent is 1:1 or greater than 1.

- 22. (New) A coating composition, comprising a solvent and at least one polyurethane resin according to claim 14 as film forming binder.
- 23. (New) Use of a polyurethane resin according to claim 14 as at least one film forming binder in printing inks for printing plastic substrates.
- 24. (New) Method of producing a laminate carrying a printed layer, said method comprises the steps of
- a) providing a coating composition according to claim 22;
- b) applying a layer to a first substrate by printing said printing ink of step a) in a flexographic and/or gravure printing process;
- c) removing said solvent from said layer thereby drying and/or curing said layer obtained in step b),
- d) applying an adhesive to the dried and/or cured layer obtained in step c) and producing

the laminate by applying at least a second substrate on the adhesive.

25. (New) Laminate produced by the method of claim 24.